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Greater Hog Production Your Contricution to Victory

G. A. McDonald

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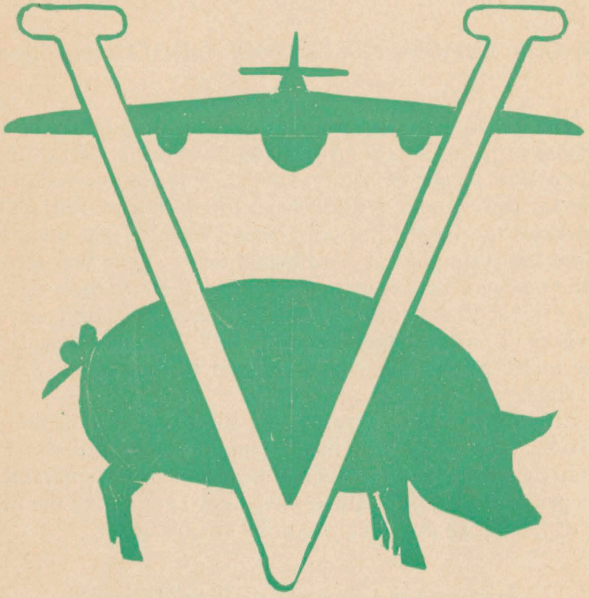
Hog Production



Your Contribution To Victory

This leaflet is a brief, concise outline of the best hog production practices and rations recommended by your State College of Agriculture.

South Dakota State College
Extension Service

Hog Production
In South Dakota
And the Victory Program

by G. A. McDONALD, Extension Animal Husbandman

The national victory program calls for a slaughter of 80,000,000 hogs in 1942. South Dakota must do its part to meet this goal, the largest in history. 1,690,000 pigs were saved in the state last spring and 389,000 head in the fall of 1941. This represents the largest pig crop since 1933. 265,000 sows farrowed last spring and it is estimated that 371,000 will farrow in the spring of 1942 or an increase of 40%. From these figures it is evident that South Dakota will have little difficulty in reaching its pork production goal of a 15% increase over 1941. The major production will take place in the eastern 2/5 of the state.

Although we will experience a high pork production in 1941-42, hog prices will likely remain stable and the hog producer will profit. The federal government has guaranteed hog prices at 85% of parity to the end of 1942 and to the middle of 1943 at an average price of $9 at Chicago.

Increase the Percent of Pigs Weaned

Surveys conducted by the United States Department of Agriculture indicate that 35 pigs for each 100 farrowed are lost up to weaning time and an additional loss of 5 to 10% occurs after weaning. Only 60% of the pigs farrowed reach market. Saving more pigs per litter will reduce costs and increase profits. Putting into practice sanitation practices will reduce pig losses.

How to Raise Healthy Pigs

1. Before placing in farrowing pen clean sow by washing with warm soap and water. This removes dirt, thousands of worm eggs, and other types of disease germs.
2. Place sow in a clean farrowing pen that has been scrubbed with boiling lye water. Use one can of lye to 30 gallons of water. Disinfect farrowing pen with a standard four percent disinfectant such as coal tar, dip, or creosote.
3. Provide guard rails around farrowing pen about eight inches from the floor and 10 inches from the wall. Don't use too much straw as bedding.
4. Provide the pigs in the farrowing pen with clean soil to prevent anemia.
5. Haul, don't drive, the sow and litter to a clean pasture. "Clean" means land that has been cultivated since last used as a hog pasture.
6. Keep the pigs on pasture for about five months. Provide plenty of clean water but no mud wallows. The pigs should have access to cheaply constructed shelter during the hot weather. Portable individual farrowing houses are convenient and comparatively inexpensive.
7. Vaccinate for cholera about weaning time.
8. If growing pigs are mangy dip three or four times at intervals of from 10 to 12 days in a solution of 25 parts water to one part of liquid lime sulphur. One pint of kerosene mixed in a gallon of crank case oil would serve as a good preventive.

Feeding and Management of the Brood Sow

Proper feeding and management of the pregnant sow or gilt will reduce pig losses and mean more efficient gains on the growing pigs. The sow should be fed to gain 75 to 100 pounds during the gestation period, but should not become overly fat. Ample exercise should be provided. Gilts will need 1¾ to 2 pounds of grain per 100 pounds of weight per day. Older sows will require less, 1⅓ to 1½ pounds will suffice.

The following grain mixtures are suggested:—

1. ⅔ shelled corn or sooner Milo. ⅓ whole oats.
2. ⅓ shelled corn. ⅓ ground barley. ⅓ ground oats.

The body of a new born pig consists of 70% protein, 20% mineral matter and 10% fat. It is highly essential therefore, that the pregnant sow's ration contain adequate amounts of these important nutrients. Animal and plant proteins should be provided. The following mixtures are recommended:—

1. Equal parts by weight of tankage and linseed oil meal.
2. 25 parts tankage, 25 parts linseed oil meal and 25 parts soybean oil meal.

The protein supplement should be provided during the entire gestation period of the gilt and at least the last six or eight weeks for the mature sow. If alfalfa is available, it should be fed by all means as it is especially rich in Vitamin D as well as minerals and protein. The alfalfa should be fed in racks conveniently located. If alfalfa is fed, only about ⅓ pound of tankage or the protein mixture per day will be required. If the alfalfa is not available, about ½ pound of protein is needed. One gallon of skimmilk per day will replace other protein supplements.

Mineral Mixtures

A simple mineral mixture consisting of 40 parts steamed bone meal, 40 parts finely ground limestone and 20 parts stock salt should be easily accessible to the sows, growing fattening pigs, and breeding stock at all times. This may be mixed and fed in a box or self-feeder. Salt should be fed in addition.

Feeding the Sow and Litter

After farrowing the sow will need no feed for 24 hours, although plenty of water should be provided. On the second day a light feed of bran or shorts is excellent, following with a light ration of 50-50 corn and oats and gradually increasing the feed until in 10 days the sow is on full feed. The amount of milk produced is influenced by the amount of feed fed. The object is to increase milk-flow as the pigs become older. Normally sows will consume about 10 to 12 pounds of feed per day.

Home grown feeds should be utilized to the best advantage. However, these feeds must be balanced with proteins, minerals, and quality pasture for the most economical gains on the growing pigs. The following combination of feeds represent rations for the sow and litter containing all the essential food constituents.

Ration 1	Ration 2
60% ground corn	30% ground corn
30% ground oats	30% ground barley
7% tankage	30% ground oats
3% linseed or soybean oil meal	7% tankage
	3% linseed or soybean oil meal

In the above rations sorghum grain could be substituted for corn.

Self-feeding the sow and litter after the pigs are about three weeks old will produce faster gains on less feed as compared to hand feeding.

Creep Feeding Pigs

Pigs will eat from a creep when about two weeks old. This method is highly desirable especially when self feeders are not available for sow and litter. The creep is a small pen containing feed into which the pigs can go but not the sows. Vertical slats are generally used about 10-12 inches apart. Rolled oats or shelled corn are good to start the pigs to eat. The following are proven rations for creep feeding pigs:—

Ration 1	Ration 2
2 parts cracked corn	6 parts ground grain sorghum
2 parts wheat middlings	2 parts ground oats
1 part tankage	1 part tankage
1 part soybean oil meal	1 part soybean oil meal

One half pint to 1 pint of skimmilk or buttermilk daily to pigs as soon as they will drink will improve the above rations.

Weaning

Most pigs are generally weaned at eight to ten weeks of age. The pigs should weigh 35 to 40 pounds. It is generally advisable to reduce the sow's ration in order to reduce her milk flow. The South Dakota Experiment Station finds it a **good** practice to put the sow on straight corn. If the sow has been on a self feeder, panels may be used to exclude the sows but admit the pigs. It is generally better to remove the sows than the pigs. Some hogmen recommend returning the sows to the pigs after a day, especially with heavy milking sows.

Pastures Provide Cheapest Gains

Experiments indicate that pigs raised on good pasture put on 26% more gain with 12 to 15% less grain. This is because such pigs are healthy and receive more variety of protein and mineral. A good pasture rotation might consist of rye, spring sown grain, alfalfa and rape, managed in such a way that the pigs are on land that did not have hogs on it the previous year.

Feeding Growing Fattening Pigs on Pasture

After weaning, the hog grower continues feeding similar rations; and makes changes gradually, yet balances corn and farm grown grains with essential proteins and minerals. Basic grains will be corn, barley, oats, sorghum grain, and rye. Rye, however, should not constitute more than ¼ of the grain mixture. Growing pigs will eat about 4% of their live weight in feed daily. Following are suggested rations:—

Ration 1 — 30 to 100 pound pigs — Ration 2

Shelled corn, 85 to 90 pounds	Ground barley self fed
Tankage, 10 to 15 pounds	Skimmilk, 3-4 pounds per head daily, or
	Tankage, 6 to 8 pounds per 100 pounds of grain

Ration 3 — 100 to 175 pound pigs — Ration 4

Shelled corn, 90 to 92 pounds	Ground shelled corn, 50 pounds
Tankage, 8 to 10 pounds	Ground barley, 42 pounds
	Tankage, 8 pounds

In the above rations sorghum grain may be substituted for corn. All rations should be supplemented with pasture—preferably a good legume—and should be self fed, free choice, if possible. Illinois experiments indicate that $9 growing fattening pigs on good pasture will return $25.56 per acre.

The above rations may be improved by feeding a protein supplement consisting of 50 parts tankage, 25 parts linseed oil meal and 25 parts soybean oil meal instead of tankage as the only protein feed. Skimmilk may be used to improve the above mixture or entirely replace the protein supplement. If skim milk is fed, however, it should not be used excessively. The following rule will be helpful in determining the amount to use:

50 to 100 pound pigs—2.5 to 3 pounds of milk to 1 pound of corn; 100 to 150 pound pigs—2 to 2.5 pounds of milk to 1 pound of corn; 150 to 200 pound pigs—1.5 to 2 pounds of milk to 1 pound of corn; Over 200 pound pigs—1 to 1.5 pounds of milk to 1 pound of corn.

Fall or Winter Feeding in Dry Lot

The same general rations as suggested above may be fed to pigs in dry lot. Alfalfa should be available in racks. If alfalfa is not available a more complete protein supplement mixture may be used as follows:—

50 parts tankage
20 parts linseed oil meal
20 parts soybean oil meal
10 parts fish or alfalfa meal

Common Hog Diseases

Necrotic Enteritis is a common disease of pigs weighing 40 to 50 pounds. It is characterized by cough, profuse diarrhea and unthriftiness. Sanitary measures are important in control of this disease. Little difficulty is experienced if the pigs are raised on clean ground. Specific treatment consists of feeding ½ to 1½ grains of nicotinic acid per pig daily dissolved in water and poured on the feed. One-half ounce (tablespoonful) of a one percent solution of copper sulphate given in the drinking water to each pig once a day as an internal antiseptic is helpful.

Swine Erysipelas, a contagious disease of hogs, acts very much like hog cholera and very difficult to diagnose without the aid of a microscope. No permanent vaccine is available as yet. Serum is used in sick herds and quite specific. Be sure that the hogs are immune against hog cholera.

The Common Round Worm infests pigs when they weigh about 50 pounds. Pigs which are infested commonly show unthriftiness and "pot bellies" and frequently some necrotic enteritis. Worms may be prevented by having clean ground for pasture and clean surroundings at farrowing time. The best treatment for worms is a dose consisting of one ounce of castor oil and 15 drops oil of chenopodium for each pig. This dose is best given by the use of a dose syringe. Pigs should be kept off feed 12 hours before treatment.

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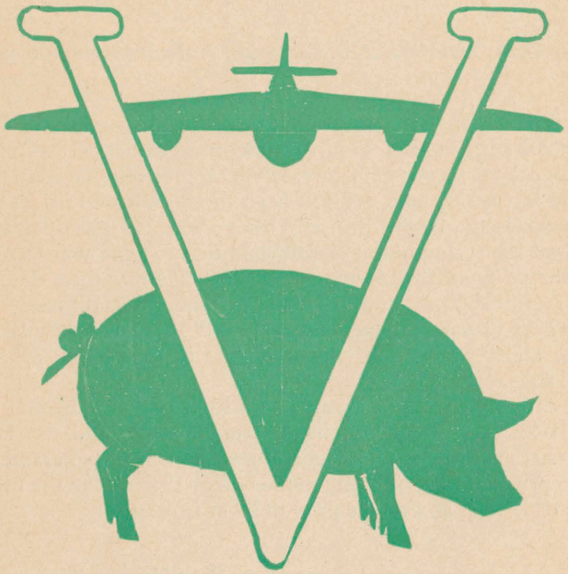

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